Application for Environmental Laboratory Certification
Office of Environmental Laboratory Certification

A. Purpose of Application: Check one.

__ Initial Certification Lab Previously Certified __ Yes __ No If Yes, Old I.D.# _ _ _ _ _
__ Additional Parameter Certification **Assigned S.C. Laboratory I.D. #** _ _ _ _ _
__ Recertification due to Failure to Meet PT Requirements **Assigned S.C. Laboratory I.D.#** _ _ _ _ _

B. Laboratory Name:

C. Mailing Address

(P.O. Box or Number and Street)

(City) (State) (Zip Code)

D. Physical Address:

(Number and Street)

(City) (State) (Zip Code)

County Code Number

E. Billing Address (for Certification Fees):

(Billing Name)

(P.O. Box or Number and Street)

(City) (State) (Zip Code)

F. Laboratory Telephone Number:

G. Laboratory FAX Number:

H. Type of Laboratory

__ Commercial
__ Federal
__ Field Parameter (pH, residual chlorine, dissolved oxygen and/or temperature)
__ Industrial
__ Mobile
__ Municipal

I. Certification Contact Person for Laboratory:

Telephone Number Extension E-Mail Address:

J. Out-of-State Laboratories Only:

Attach a copy of the current certificate, list of parameters, last two EPA WS and WP PE study results, most recent on-site evaluation report and response to deviations from the following State Certification Programs: **Only one State Certifying Authority for each Designated Program Area. Organic certification requires the method and analyte list from the State Certifying Authority for each Program Area.**

Safe Drinking Water Act: _____ Expiration Date: _____
(Name of State Certifying Authority)

Clean Water Act: _____ Expiration Date: _____
(Name of State Certifying Authority)

Solid and Hazardous Waste: _____ Expiration Date: _____
(Name of State Certifying Authority)

K. Laboratory Director: Designate the person responsible for the laboratory operations. Attach resume.

Telephone Number: Extension E-Mail Address:

Education:
Name of Institution:

Degree:

Major Field:

Certificates or Registrations Held:

Issuing Agency:

Date of Issue:

Experience (related to laboratory analysis):

L. Laboratory Personnel: List all personnel involved in the laboratory operations. Please make copies of this form for additional personnel. Resumes may be attached.

Name and Position Held:

Education and Experience:

License or Registration:

Primary Responsibilities in the Laboratory:

Name and Position Held:

Education and Experience:

License or Registration:

Primary Responsibilities in the Laboratory:

Name and Position Held:

Education and Experience:

License or Registration:

Primary Responsibilities in the Laboratory:

Name and Position Held:

Education and Experience:

License or Registration:

Primary Responsibilities in the Laboratory:

Name and Position Held:

Education and Experience:

License or Registration:

Primary Responsibilities in the Laboratory:

M. Safe Drinking Water Act Methodology:

Disinfection By-Products: Circle only the EPA-approved methodology that the laboratory is seeking certification to Perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification For each parameter and method circled.

Parameter	Methodology[1]		
	EPA	Standard Methods	Other
Alkalinity (See Minerals, page 5)			
Bromate	EPA 300.1[12] EPA 317.0 Rev 2.0[45] EPA 326.0[45] EPA 321.8[45 46]		
Bromide	EPA 300.0[7] EPA 300.1[12]		
Residual Chlorine (See Miscellaneous, page 6)			
Chlorine Dioxide (See Miscellaneous, page 6)			
Chlorite (Monthly/Daily)[11]	EPA 300.0[7] EPA 300.1[12] EPA 317.0 Rev.2.0 EPA 326.0 EPA 327.0 Rev.1.1	SM 4500-ClO_2 E[11]	
pH/Hydrogen-Ion Concentration (See Minerals, page 5)			
TOC/DOC[47 48] (See Demand, Page 4)			
UV_{254}[49]	EPA 415.3 Rev.1.1	SM 5910 B	

Inorganic-Demand: Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each parameter and method circled.

Parameter	Methodology[1]		
	EPA	Standard Methods	Other
Total Organic Carbon/ Dissolved Organic Carbon (TOC/DOC)[47 48]	EPA 415.3 Rev.1.1	SM 5310 B SM 5310 C SM 5310 D	

M. Safe Drinking Water Act Methodology:

Inorganic Mineral: Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each parameter and method circled.

Parameter	Methodology[1]		
	EPA	Standard Methods	Other
Alkalinity		SM 2320 B	
Calcium-Hardness		SM 3500-Ca D	
Chloride	EPA 300.0[7] EPA 300.1[12]	SM 4110B SM 4500-Cl^-B SM 4500-Cl^-D	
Fluoride	EPA 300.0[7] EPA 300.1[12]	SM 4110B SM 4500-F^- B,D SM 4500-F^- C SM 4500-F^- E	
Hydrogen-Ion Concentration (pH)	EPA 150.1 EPA 150.2	SM 4500-H^+B	
Specific Conductance		SM 2510 B	
Sulfate	EPA 300.0[7] EPA 300.1[12] EPA 375.2	SM 4110B SM 4500-SO_4^{2-}F SM 4500-SO_4^{2-}C SM 4500-SO_4^{2-}D SM 4500-SO_4^{2-}E	

Inorganic-Miscellaneous: Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each parameter and method circled.

Parameter	Methodology[1]		
	EPA	Standard Methods	Other
Asbestos	EPA 100.1 EPA 100.2		
Chlorine Dioxide	EPA 327.0 Rev. 1.1	SM 4500-ClO_2 C[8] SM 4500-ClO_2 D SM 4500-ClO_2 E	
Color - Visual - Spectrophotometric (Tristimulus) - Spectrophotometric (Plat. Cobalt)		SM 2120 B SM 2120 C	NCASI-TB253[9]
Cyanide (Manual Distillation Required)	EPA 335.4[7]	SM 4500-CN^-C,E SM 4500-CN^- F	Kelada 01[33] 10-204-00-1-X[34] OIA-1677[32]
Cyanide- Amendable to Chlorination (Manual Distillation Required)		SM 4500-CN^-C,G	
Odor		SM 2150 B	

M. Safe Drinking Water Act Methodology:

Inorganic-Miscellaneous Cont.: Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each parameter and method circled.

Parameter	Methodology[1]		
	EPA	Standard Methods	Other
Residual Chlorine		SM 4500-Cl D SM 4500-Cl E SM 4500-Cl F SM 4500-Cl G SM 4500-Cl H SM 4500-Cl I	
Surfactants (MBAS)		SM 5540 C	
Temperature		SM 2550 B	
Turbidity	EPA 180.1[7]	SM 2130 B	GLI Method 2[10] Hach FilterTrak[35]

Inorganic – Nutrient: Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each parameter and method circled.

Parameter	Methodology[1]		
	EPA	Standard Methods	Other
Nitrate-Nitrogen	 EPA 300.0[7] EPA 300.1[12] EPA 353.2[7]	SM 4110 B SM 4500-NO_3^-F SM 4500-NO_3^-E SM 4500-NO_3^-D	
Nitrate-Nitrite (NO_3 + NO_2)	 EPA 300.0[7] EPA 300.1[12] EPA 353.2[7]	SM 4110B SM 4500-NO_3^-F SM 4500-NO_3^-E	
Nitrite-Nitrogen	 EPA 300.0[7] EPA 300.1[12] EPA 353.2[7]	SM 4110B SM 4500-NO_3^-F SM 4500-NO_3^-E SM 4500-NO_2^-B	
Orthophosphate	EPA 300.0[7] EPA 300.1[12] EPA 365.1[7]	SM 4110 B SM 4500-P F SM 4500-P E	
Phosphorus	EPA 300.0[7] EPA 365.1[7] EPA 365.2 EPA 365.3	SM 4110 B SM 4500-P F SM 4500 P E	

M. Safe Drinking Water Act Methodology:

Inorganic – Residue: Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification from each parameter and method circled.

Parameter	Methodology[1]		
	EPA	Standard Methods	Other
Residue, Filterable (TDS)		SM 2540 C	

Inorganic – Trace Metal: Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each parameter and method circled.

Parameter	FLAA	GFAA/ Platform	GFAA/ Furnace	ICP		ICP/ MS	Other	
	SM[1]	EPA[1]	SM[1]	EPA[1]	SM[1]	EPA[1]		
Aluminum	3111 D	200.9	3113 B	200.7	3120 B	200.8		
Antimony		200.9	3113 B			200.8		
Arsenic		200.9	3113 B			200.8		
Barium	3111 D		3113 B	200.7	3120 B	200.8		
Beryllium		200.9	3113 B	200.7	3120 B	200.8		
Cadmium		200.9	3113 B	200.7		200.8		
Calcium	3111 B			200.7	3120 B			
Chromium		200.9	3113 B	200.7	3120 B	200.8		
Copper	3111 B	200.9	3113 B	200.7	3120 B	200.8		
Iron	3111 B	200.9	3113 B	200.7	3120 B			
Lead		200.9	3113 B			200.8		
Magnesium	3111 B			200.7	3120 B			
Manganese	3111 B	200.9	3113 B	200.7	3120 B	200.8		
Mercury						200.8	EPA 245.1 EPA 245.2	SM 3112 B
Nickel	3111 B	200.9	3113 B	200.7	3120 B	200.8		
Selenium		200.9	3113 B			200.8		
Silica				200.7	3120 B			4500 Si D 4500 Si E 4500 Si F
Silver	3111 B	200.9	3113 B	200.7	3120 B	200.8		
Sodium	3111 B			200.7				
Thallium		200.9				200.8		
Zinc	3111 B			200.7	3120 B	200.8		

The Standard Methods reference for the following methods is limited to the 18th, 19th Editions and Standard Methods On-line: SM 3111B, SM 3111D, SM 3112B, SM3113B, SM 3114B. The 20th Edition of Standard Methods is not an approved reference for these methods.

M. Safe Drinking Water Act Methodology:

Microbiology: Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. The laboratory must be approved for a total coliform method and a fecal coliform or *E. coli* method. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each parameter and method circled.

Parameter	Methodology[1]	
	EPA	Standard Methods[1]
E. coli Confirmation	EPA 1104 (EC-MUG) EPA 1105 (Nut Agar + MUG)	
Fecal Coliform (MPN)		SM 9221C, E
Fecal Coliform (MF)		SM 9222 D
Fecal Coliform Confirmation		SM 9221 E
Heterotrophic Bacteria[37]		SM 9215 B SimPlate[36]
Microscopic Particulate Analysis	EPA 310/9-92-029	
Total Coliform (Delayed Incubation)		SM 9222 C
Total Coliform (MF)[2]		SM9222B (M-endo medium)
Total Coliform (MPN)		SM 9221 B
Total Coliform (P-A)		SM 9221 D
Total Coliform/*E. coli* (Presence/Absence)		SM 9223B Colilert[3] Colisure®[4] E*Colite®Test[5] m-ColiBlue24®[6] ReadyCult® Coliforms 100[39] Colitag®[40] ChromoCult® Agar[38]
Total Coliform/*E. coli* (MPN)		SM 9223B Colilert Quanti-Tray®[3]
Total Coliform/*E.coli* (MI agar)	EPA 1604[23]	

***E.coli* Methodology for LT2 Rule**

Total Coliform/*E.coli* (MPN)		SM 9223B Colilert®/Colilert-18® Quanti-Tray®
E.coli Enumeration Membrane Filtration		SM 9222B/9222G
E.coli Enumeration MPN		SM 9221B.1/9221F.1
E.coli Enumeration (m-TEC)	EPA 1103.1	SM 9213D
E.coli Enumeration (Modified m-TEC)	EPA 1603	
Total Coliform/*E.coli* Enumeration (MI agar)	EPA 1604	
E.coli Enumeration (m-ColiBlue24®)		m-ColiBlue24®[6]

M. Safe Drinking Water Act Methodology:

Trihalomethanes: Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each method and organic contaminant circled. Submit current IDOCs and MDL Studies (within the past year) for each method that the laboratory has applied for certification using the enclosed form.

Parameter	EPA Methodology[13]				
	GC		GC/MS		
Volatile Organics by P&T – GC/PID/Hall	502.2				
Purgeable Organics by Cap. Col. – GC/MS			524.2		
Disinfection Byproducts & Chlor. Solvents GC-ECD		551.1			

Volatiles (VOCs): Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each method and organic contaminant circled. Submit current IDOCs and MDL Studies (within the past year) for each method that the laboratory has applied for certification using the enclosed form.

Parameter	EPA Methodology[13]				
	GC		GC/MS		
Volatile Organics by P&T – GC/PID/Hall	502.2				
Purgeable Organics by Cap. Col. – GC/MS			524.2		
Disinfection Byproducts & Chlor. Solvents GC/ECD		551.1			

Synthetic Organic Chemicals (SOCs): Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each method and organic contaminant circled. Submit current IDOCs and MDL Studies (within the past year) for each method that the laboratory has applied for certification using the enclosed form.

Analytical Method	EPA Methodology[13]				
	GC		GC/MS	HPLC	
Tetra-Octa-Chlor. Dioxins & Furans - HRGC/HRMS			1613B		
EDB, DBCP, 1,2,3 TCP by Microext - GC/ECD	504.1				
Organohalide Pest & PCBs by Microext - GC/ECD	505[16]				
Phthalate and Adipate Esters - GC-PID	506				
Nitrogen & Phosphorus Pesticides - GC/NPD	507				
Chlorinated Pesticides by Liq-Liq Ext. - GC/ECD	508				
Chlorinated Pesticides by LSE - GC/ECD	508.1				
Screening for PCBs by Perchlorination - GC/ECD	508A[14]				
Chlorinated Acids by Liq-Liq Ext. - GC/ECD	515.1				
Chlorinated Acids by Liq-Solid Ext. - GC/ECD	515.2				
Chlorinated Acids by Liq-Liq Ext. - GC/ECD	515.3	555			

M. Safe Drinking Water Act Methodology:
Synthetic Organic Chemicals (SOCs) Cont.

Chlorinated Acids by Liq-Liq Micro Ext - GC/ECD	515.4				
Organic Compounds by Liq-Solid Ext. - GC/MS			525.2		
N-Methylcarbamoyloximes & Carbamates - HPLC				531.1 531.2	
Glyphosate - HPLC/Fluorescence Detector				547	SM 6651[1]
Endothall - GC/MS			548.1		
Diquat & Paraquat - HPLC/UV Detector				549.2	
Polynuclear Arom. Hydroc. (PAHs) - HPLC/UV & Fluores.				550 550.1	
Disinfection ByProducts, Chlor. Solvents,Halogenated Pest/Herb - GC/ECD	551.1				
Haloacetic Acids & Dalapon by Ion Exchange Liq-Solid Ext. – GC/ECD	552.1				
Haloacetic Acids & Dalapon by Liq-Liq Ext. - GC-ECD	552.2 552.3	SM 6251B			

Inorganic – Radiological: Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certification must reflect the appropriate certification for each parameter and method circled.

Parameter	EPA[1] Methodology	Standard Methods[1]
^{131}Iodine	EPA 901.1 EPA 902.0	SM 7120 SM 7500-I B SM 7500-I C SM 7500-I D
Gross Alpha	EPA 900.0	SM 302 (13th ed.) SM 7110B SM 7110C
Gross Beta	EPA 900.0	SM 302 (13th ed.) SM 7110B
^{226}Radium	EPA 903.0 EPA 903.1	SM 304 (13th ed.) SM 7500-Ra B SM 305 (13th ed.) SM 7500-Ra C
^{228}Radium	EPA 904.0	SM 7500-Ra D
^{89}Strontium	EPA 905.0	SM 303 (13th ed.) SM 7500-Sr B
^{90}Strontium	EPA 905.0	SM 303 (13th ed.) SM 7500-Sr B
Tritium	EPA 906.0	SM 306 (13th ed.) SM 7500-^{3}H B
Uranium Radiochemical Fluorometric Alpha Spectrometry ICP/MS	 EPA 908.0 EPA 908.1 EPA 200.8	 SM 7500-U B SM 7500-U C (17th Ed.) SM 7500-U C (18th & 19th ed.)
Gamma Emitters [43]	EPA 901.1 EPA 902.0 EPA 901.0	SM 7120 SM 7500 Cs B SM 7500 I B

N. Clean Water Act Methodology

Microbiology: Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each parameter and method circled.

Parameter	Methodology[1]		
	EPA	Standard Methods	Other
Enterococci (MF)	EPA 1600[18]		
Enterococci (MPN)			Enterolert[17]
Fecal Coliform (MF)		SM 9222 D	
Fecal Coliform (MPN)	EPA 1680[24] EPA 1681[24]	SM 9221 C, E	
Biosolids Preparation			EPA/625/R-92/013 App F[42]
Total Coliform (MF)		SM 9222 B	
Total Coliform (MPN)		SM 9221 B	
Fecal Streptococci (MF)		SM 9230 C	
Fecal Streptococci (MPN)		SM 9230 B	
E.Coli (MF)	EPA 1603		m-ColiBlue24®[6]
E.Coli (MPN)		SM 9223B Colilert®/Colilert-18® Quanti-Tray®	

Taxonomy: Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each parameter and method circled.

Parameter	Methodology		
	EPA	Standard Methods	Other
Freshwater Fish			Key/Reference
Freshwater Macroinvertebrates			
Ichthyoplankton			
Macrophytes			
Marine/Estuarine Fish			
Marine/Estuarine Macroinvertebrates			
Periphyton			
Phytoplankton			
Zooplankton			

N. Clean Water Act Methodology:

Toxicity Testing: Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Laboratories must be certified for pH, DO, alkalinity, specific conductance, hardness, and residual chlorine in order to become certified for toxicity. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each parameter and method circled. If the certificate does not state that the laboratory's certification includes pH, DO, alkalinity, specific conductance, hardness, and residual chlorine; a letter from the State Certifying Authority stating that these parameters have been evaluated, must be submitted with this application.

Parameter	Methodology		
	EPA	Standard Methods	Other
Ceriodaphnia dubia			
Acute Toxicity - Ceriodaphnia dubia	EPA 2002.0[19]		
Chronic Toxicity - Ceriodaphnia dubia	EPA 1002.0[20]		
Mysidopsis bahai			
Acute Toxicity - Mysidopsis bahai	EPA 2007.0[19]		
Chronic Toxicity - Mysidopsis bahai	EPA 1007.0[21]		
Pimephales promelas			
Acute Toxicity - Pimephales promelas	EPA 2000.0[19]		
Chronic Toxicity - Pimephales promelas	EPA 1000.0[20]		
Daphnia ambigua			
Acute Toxicity - Daphnia ambigua	EPA 2002.0[19]		
Chronic Toxicity - Daphnia ambigua	EPA 1002.0[20]		
Cyprinodon variegates			
Acute Toxicity - Cyprinodon variegates	EPA 2004.0[19]		
Chronic Toxicity - Cyprinodon variegates	EPA 1004.0[21]		
Menidia Beryllina			
Acute Toxicity – Menidia Beryllina	EPA 2006.0[19]		
Chronic Toxicity – Menidia Beryllina	EPA 1006.0[21]		

Inorganic – Biological Examinations: Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each parameter and method circled.

Parameter	Methodology[1]		
	EPA	Standard Methods	Other
Biomass – Plankton		SM 10200 I	
Biomass – Peripyton (Dry Weight)		SM 10300 C	
Chlorophyll a	EPA 445.0[41]	SM 10200 H	

N. Clean Water Act Methodology:

Inorganic – Demand: Circle only the EPA-approved methodology that the laboratory is seeking to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each parameter and method circled.

Parameter	Methodology[1]		
	EPA	Standard Methods	Other
Biochemical Oxygen Demand (BOD_5)		SM 5210 B	
Carbonaceous BOD ($CBOD_5$)		SM 5210 B	
Chemical Oxygen Demand	EPA 410.3 (Rev. 1978) EPA 410.4 Rev.2.0 (1993)	SM 5220 C SM 5220 D	 Hach 8000
Dissolved Oxygen		SM 4500-O C SM 4500-O-G	 ASTM D888-05
Total Organic Carbon (TOC)		SM 5310 B SM 5310 C SM 5310 D	

Inorganic – Mineral: Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each parameter and method circled.

Parameter	Methodology[1]		
	EPA	Standard Methods	Other
Acidity		SM 2310 B(4a)	
Alkalinity	 EPA 310.2 (Rev. 1974)	SM 2320 B	
Chloride	EPA 300.0 Rev 2.1 (1993) EPA 300.1 Rev 1.0 (1997)	SM4110 B SM 4500-Cl^-B SM 4500-Cl^-E SM4500-Cl^-D SM 4500-Cl^-C	
Fluoride (Manual distillation required)	EPA 300.0 Rev. 2.1 (1993) EPA 300.1 Rev 1.0 (1997)	SM 4110 B SM 4500-F^-B,D SM 4500-F^-B,C SM 4500-F^-B,E	
Hardness, Total ($CaCO_3$)	EPA 130.1 (Rev. 1971)	 SM 2340 C SM 2340 B(calc.)	
Hydrogen-Ion Concentration (pH)	 EPA 150.2 (Rev. 1982)	SM 4500-H^+B	
Specific Conductance	EPA 120.1(Rev. 1982)	SM 2510 B	
Sulfate	EPA 300.0 Rev. 2.1 (1993) EPA 300.1Rev 1.0 (1997) EPA 375.2 Rev. 2.0 (1993)	SM 4110 B SM 4500-SO_4^{2-}C SM 4500-SO_4^{2-}D SM 426C (15^{th} Ed.)	

N. Clean Water Act Methodology

Inorganic – Miscellaneous: Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each parameter and method circled.

Parameter	Methodology[1]		
	EPA	Standard Methods	Other
Absorbable Organic Halides(AOX)	EPA 1650C		
Bromide	EPA 300.0 Rev.2.1 (1993) EPA 300.1Rev 1.0 (1997)	SM 4110 B	
Total Cyanide – (Manual distillation with $MgCl_2$ required)	EPA 335.4 Rev.1.0 (1993)	SM 4500-CN^-C,D SM 4500-CN^-C,E SM 4500-CN^-C,F	10-204-00-1-X[34] Kelada-01[33]
Available Cyanide		SM 4500-CN^-G	OIA-1677[32] Kelada-01[33]
Oil and Grease	EPA 1664A		
Phenolics, Total Recoverable	EPA 420.1 Rev. 1978 EPA 420.4 Rev.1.0 (1993)	SM 510 A,B,C (14th Ed.)	
Residual Chlorine		SM 4500-Cl D SM 4500-Cl C SM 4500-Cl B SM 4500-Cl F SM 4500-Cl G SM 4500-Cl E	
Sulfide		SM 4500-S^{2-} F 19th SM 4500-S^{2-} E 18th SM 4500-S^{2-} D SM 4500-S^2 G	
Sulfite		SM 4500-SO_3^{2-} B	
Surfactants (MBAS)		SM 5540 C	
Temperature		SM 2550 B	
Turbidity	EPA 180.1 Rev.2.0 (1993)	SM 2130 B	

Inorganic – Residue: Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each parameter and method circled.

Parameter	Methodology[1]		
	EPA	Standard Methods	Other
Residue, Filterable (TDS)		SM 2540 C	
Residue, Non-filterable (TSS)		SM 2540 D	
Residue, Settleable (SS)		SM 2540 F	
Residue, Total (TS)		SM 2540 B	
Residue, Volatile (VS)	EPA 160.4		
Total, Fixed, & Volatile Solids [44]		SM 2540 G	

N. Clean Water Act Methodology

Inorganic – Nutrient: Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each parameter and method circled.

Parameter	Methodology[1]		
	EPA	Standard Methods	Other
Ammonia-Nitrogen – (Manual distillation required unless comparability study performed) **Note: If using Standard Methods you must specify the Edition**	EPA 350.1 Rev. 2.0 (1993)	SM 4500-NH_3 H SM 4500-NH_3 B SM 4500-NH_3 C SM 4500-NH_3D SM 4500-NH_3 E SM 4500-NH_3 F SM 4500-NH_3 G	
Kjeldahl Nitrogen **Note: If using Standard Methods you must specify the Edition**	EPA 351.1 (Rev. 1978) EPA 351.2 Rev. 2.0 (1993)	SM 4500-Norg B or C SM 4500-NH_3 B SM 4500-NH_3 C SM 4500-NH_3 D SM 4500-NH_3 E SM 4500-NH_3 F SM 4500-NH_3 G	
Nitrate-Nitrogen	EPA 352.1 EPA 300.0 Rev.2.1 (1993) EPA 300.1 Rev 1.0 (1997)	SM4110 B SM 4500-NO_3 D	NO_3-NO_2 Minus NO_2
Nitrate-Nitrite (NO_3 + NO_2)	EPA 353.2 Rev. 2.0 (1993) EPA 300.0 Rev.2.1 (1993) EPA 300.1Rev 1.0 (1997)	SM 4500-NO_3^- H SM 4500-NO_3^- E SM 4500-NO_3^- F SM 4110 B	
Nitrite-Nitrogen	EPA 353.2 Rev. 2.0 (1993) EPA 300.0 Rev.2.1 (1993) EPA 300.1Rev 1.0 (1997)	SM 4500-NO_2^- B SM 4500-NO_3^- E SM 4500-NO_3^- F SM 4110 B	
Orthophosphate	EPA 365.1 Rev. 2.0 (1993) EPA 365.3 (Rev. 1978) EPA 300.0 Rev.2.1 (1993) EPA 300.1 Rev 1.0 (1997)	SM 4500-P F SM 4500-P E SM 4110 B	
Phosphorus	EPA 365.1 Rev. 2.0 (1993) EPA 365.3 (Rev. 1978) EPA 365.4 (Rev. 1974)	SM 4500-P F SM 4500-P E	
Total Organic Nitrogen	EPA TKN-NH3(N)		

N. Clean Water Act Methodology:

Inorganic – Trace Metal: Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each parameter and method circled.

Parameter	FLAA	STGFAA	AA Furnace		ICP		ICP/MS	Other	
	SM[1]	EPA[1]	EPA[1]	SM[1]	EPA[1]	SM[1]	EPA[1]	EPA[1]	SM[1]
Aluminum	3111 D	200.9		3113 B	200.7	3120 B	200.8		
Antimony	3111 B	200.9		3113 B	200.7	3120 B	200.8		
Arsenic		200.9		3113 B	200.7	3120 B	200.8		
Barium	3111 D			3113 B	200.7	3120 B	200.8		
Beryllium	3111 D	200.9		3113 B	200.7	3120 B	200.8		
Boron					200.7	3120 B			
Cadmium	3111 B 3111 C	200.9		3113 B	200.7	3120 B	200.8		
Calcium	3111 B				200.7	3120 B			
Chromium	3111 B 3111C	200.9		3113 B	200.7	3120 B	200.8		
Chromium VI	3111C							218.6 Rev. 3.3 (1994)	3500-Cr D 3500-Cr E
Cobalt	3111 B 3111 C	200.9		3113 B	200.7	3120 B	200.8		
Copper	3111 B 3111 C	200.9		3113 B	200.7	3120 B	200.8		
Gold	3111 B		231.2 (Rev. 1978)						
Iridium	3111 B		235.2 (Rev. 1978)						
Iron	3111 B 3111 C	200.9		3113 B	200.7	3120 B			
Lead	3111 B 3111 C	200.9		3113 B	200.7	3120 B	200.8		
Magnesium	3111 B				200.7	3120 B			
Manganese	3111 B	200.9		3113 B	200.7	3120 B	200.8		

The Standard Methods reference for the following methods is limited to the 18th, 19th Editions and Standard Methods On-line: SM 3111B or D, SM 3111D, SM 3112B, SM3113B, and SM 3114B. The 20th Edition of Standard Methods is not an approved reference for these methods.

N. Clean Water Act Methodology:

Inorganic – Trace Metal (cont'd): Circle the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's Certificate must reflect the appropriate certification for each parameter and method circled.

Parameter	FLAA	STGFAA	AA Furnace		ICP		ICP/MS	Other	
	SM[1]	EPA[1]	EPA[1]	SM[1]	EPA[1]	SM[1]	EPA[1]	EPA[1]	SM[1]
Mercury								1631E 245.1 Rev. 3.0 (1994) 245.2 (Rev. 1974) 245.7 Rev. 2.0 (2005)	3112B
Sampling for Low-Level Metals								EPA 1669	
Molybdenum	3111 D			3113 B	200.7	3120 B	200.8		
Nickel	3111 B 3111 C	200.9		3113 B	200.7	3120 B	200.8		
Osmium	3111 D		252.2						
Palladium	3111 B		253.2						
Platinum	3111 B		255.2						
Potassium	3111 B				200.7	3120 B			
Rhodium	3111 B		265.2						
Ruthenium	3111 B		267.2						
Selenium		200.9		3113 B	200.7	3120 B	200.8		
Silica					200.7	3120 B			
Silver	3111 C 3111 B	200.9		3113 B	200.7	3120 B	200.8		
Sodium	3111 B				200.7	3120 B			
Thallium	3111 B	200.9	279.2		200.7	3120 B	200.8		
Tin	3111 B	200.9		3113 B	200.7				
Titanium	3111 D		283.2						
Vanadium	3111 D				200.7	3120 B	200.8		
Zinc	3111 B 3111 C		289.2		200.7	3120 B	200.8		

The Standard Methods reference for the following methods is limited to the 18th, 19th Editions and Standard Methods On-line: SM 3111B or D, SM 3111D, SM 3112B, SM3113B, SM 3114B. The 20th Edition of Standard Methods is not an approved reference for these methods.

N. Clean Water Act Methodology:

Organic Analyses: Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each method and organic contaminant circled. Submit current IDOCs and MDL Studies (with the past year) for each method that the laboratory has applied for certification using the enclosed form.

Parameter	Methodology[1]		
	GC	GC/MS	HPLC
Pesticides & PCBs			
Organochlorine Pesticides & PCBs	EPA 608[15]		
Organophosphate Pesticides	SM 6630 C		
Herbicides			
Chlorinated Phenoxy Acid Herbicides	SM 6640 B		
Volatiles			
Volatile Organics by Isotope Dilution –GC/MS		EPA 1624B EPA 1624C[30]	
VOCs by Isotope Dilution – GC/MS		EPA 1666A	
VOCs by GC-FID	EPA 1671A		
Purgeable Halocarbons –GC/Hall	EPA 601		
Purgeable Aromatics – GC/PID	EPA 602		
Acrolein & Acrylonitrile – GC/FID	EPA 603		
Purgeables – GC/MS		EPA 624	
Semivolatiles			
Phenols – GC/FID	EPA 604		
Benzidines –HPLC			EPA 605
Phthalate Esters – GC/ECD	EPA 606		
Nitrosamines – GC/NPD	EPA 607		
Nitroaromatics & Isophorone – GC/FID/ECD	EPA 609		
Polynuclear Aromatic Hydrocar. (PAHs) – GC/FID or HPLC	EPA 610		EPA 610
Haloethers – GC/Hall	EPA 611		
Chlorinated Hydrocarbons – GC/ECD	EPA 612		
Base Neutrals & Acids –GC/MS		EPA 625	
SVO by Isotope –GC/MS		EPA 1625B EPA 1625C[30] EPA 1653A	
Formaldehyde, Isobutyraldehyde, and Furfural by HPLC			EPA 1667A
Dioxins & Furans			
Tetra-Octa-Chlorinated Dioxins & FuransHRGC/HRMS		EPA 1613B	
2,3,7,8-Tetrachloridibenzo-p-Dioxin		EPA 613	

O. Solid and Hazardous Waste Methodology:

Inorganic – Trace Metal: Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each parameter and method circled.

Parameter	FLAA	GFAA	Hydride	ICP	ICP/MS	Colorimetric	Cold Vapor	Other
Aluminum	7020			6010B	6020			
Antimony	7040	7041	7062	6010B	6020			
Arsenic		7060A	7061 7062	6010B	6020			
Barium	7080A	7081		6010B	6020			
Beryllium	7090	7091		6010B	6020			
Cadmium	7130	7131A		6010B	6020			
Calcium	7140			6010B				
Chromium VI						7196A		7195 7197 7198 7199
Chromium	7190	7191		6010B	6020			
Cobalt	7200	7201		6010B	6020			
Copper	7210	7211		6010B	6020			
Iron	7380	7381		6010B				
Lead	7420	7421		6010B	6020			
Lithium	7430			6010B				
Magnesium	7450			6010B				
Manganese	7460	7461		6010B	6020			
Mercury							7470A 7471A	
Molybdenum	7480	7481		6010B				
Nickel	7520	7521		6010B	6020			
Osmium	7550							
Potassium	7610			6010B				
Selenium		7740	7741A 7742	6010B				
Silica				6010B				
Silver	7760A	7761		6010B	6020			
Sodium	7770			6010B				
Strontium	7780			6010B				
Thallium	7840	7841		6010B	6020			
Tin	7870			6010B				
Vanadium	7910	7911		6010B				
Zinc	7950	7951		6010B	6020			

O. Solid and Hazardous Waste Methodology:

Microbiology: Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each parameter method circled.

Parameter	Methodology[1]		
	EPA	Standard Methods	Other
Fecal Coliform (MF)		SM 9222 D	
Fecal Coliform (MPN)		SM 9221 E	
Fecal Streptococci (MF)		SM 9230 C	
Fecal Streptococci (MPN)		SM 9230 B	
Salmonella (MF)		SM 9260 D2	
Salmonella (MPN)		SM 9260 D1	
Total Coliform (MPN)	EPA 9131		
Total Coliform (MF)	EPA 9132		

Inorganic – Demand: Circle the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each parameter and method circled.

Parameter	Methodology[1]		
	EPA	Standard Methods	Other
Total Organic Carbon (TOC)	EPA 9060A		

Inorganic – Hazardous Waste Characteristics: Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each parameter method circled.

Parameter	Methodology[1]		
	EPA	Standard Methods	Other
Corrosivity Towards steel PH (See Hydrogen-Ion Conc./Method 9040B Under Minerals)	EPA 1110A		
Dermal Corrosion	EPA 1120		
EP Toxicity Test	EPA 1310B		
Ignitability Pensky Martens Setaflash	 EPA 1010A EPA 1020B		
Ignitability of Solids	EPA 1030		
Paint Filter Liquids Test	EPA 9095B		
Liquid Release Test (LRT) Procedure	EPA 9096		
Multiple Extraction Procedure	EPA 1320		
Synthetic Precipitation Leaching Proc.	EPA 1312		
TCLP – Tox. Char. Leach. Proc. – Bottle Ext.	EPA 1311[25]		
TCLP – Tox. Char. Leach. Proc. – Zero Head	EPA 1311[26]		

O. Solid and Hazardous Waste Methodology

Inorganic – Mineral: Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each parameter and method circled.

Parameter	Methodology[1]		
	EPA	Standard Methods	Other
Chloride	EPA 9212 EPA 9250 EPA 9251 EPA 9253 EPA 9056		
Fluoride	EPA 9214 EPA 9056		
Hydrogen-Ion Concentration (pH) (Corrosivity) Hydrogen-Ion Concentration (solid)	EPA 9040C EPA 9045D		
Specific Conductance	EPA 9050A		
Sulfate	EPA 9035 EPA 9036 EPA 9038 EPA 9056		

Inorganic – Nutrient: Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each parameter and method circled.

Parameter	Methodology[1]		
	EPA	Standard Methods	Other
Nitrate-Nitrogen	EPA 9210 EPA 9056		
Nitrite-Nitrogen	EPA 9056		
Orthophosphate	EPA 9056		

O. Solid and Hazardous Waste Methodology

Inorganic – Miscellaneous: Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each parameter and method circled.

Parameter	Methodology[1]		
	EPA	Standard Methods	Other
Bomb Preparation Method	EPA 5050		
Bromide Ion Chromatography Electrode	 EPA 9056 EPA 9211		
Comp. Test (Wastes & Mem. Liners)	EPA 9090A		
Cyanide (Distillation)	EPA 9010C		
Cyanide Spectrophotometric, Automated Titrimetric & Manual Spectrophotometric[27] Electrode[27]	 EPA 9012B EPA 9014 EPA 9213		
Cyanide Amenable to Chlor. (Distillation)	EPA 9010C		
Cyanide Amen. To Chlorination Spectrophotometric, Automated Titrimetric & Manual Spectrophotometric[27] Electrode[27]	 EPA 9012B EPA 9014 EPA 9213		
Cyanide Extraction for Solids and Oils	EPA 9013		
Extract. Proc. For Oily Wastes	EPA 1330A		
Extract. Organic Halides in Solids (EOX)	EPA 9023		
Intrinsic Permeability	EPA 9100		
Oil and Grease	EPA 9070A EPA 9071B		
Phenolics, Total Recoverable Manual, Spectrophotometric Colorimetric, Automated Spectrophotometric, MBTH	 EPA 9065 EPA 9066 EPA 9067		
Purgeable Organic Halides (POX)	EPA 9021		
Saturated Hydraulic Conductance	EPA 9100		
Saturated Leachate Conductance	EPA 9100		
Sulfides, Extractable	EPA 9031		
Sulfides, Acid Soluble & Insoluble (Distillation)	EPA 9030B		
Sulfides, Acid Soluble & Insoluble Titrimetric[27] Electrode[27]	 EPA 9034 EPA 9215		
Total Chlorine in New and Used Petroleum Products by X-Ray Fluorescence Spectrometry (XRF)	EPA 9075		
Total Chlorine in New and Used Petroleum Products by OCM	EPA 9076		
Total Chlorine in New and Used Petroleum Products (Field Test Kit Methods)	EPA 9077		
Total Organic Halides (TOX)	EPA 9020B		

O. Solid and Hazardous Waste Methodology:

Organic Analyses: Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each method and organic contaminant circled. Submit current IDOCs and MDL studies (within the past year) for each determinative method and the applicable extraction/preparation and clean-up method employed.

Parameter	EPA[1] Methodology	Extraction/Preparation Method[28]
Pesticides and PCBs		
Organochlorine Pesticides by GC: Capillary Column	EPA 8081A	EPA 3510C EPA 3520C EPA 3535 EPA 3540C EPA 3541 EPA 3545 EPA 3550B EPA 3580A
Organophosphorus Pesticides by GC: Capillary Column	EPA 8141A	EPA 3510C EPA 3520C EPA 3540C EPA 3541 EPA 3545 EPA 3550B EPA 3580A
Polychlorinated Biphenyls by GC[15]	EPA 8082	EPA 3510C EPA 3520C EPA 3535 EPA 3540C EPA 3541 EPA 3545 EPA 3550B EPA 3580A
Herbicides		
Chlorophenoxy Acid Herbicides by GC	EPA 8151A	
Volatiles		
Nonhalogenated Volatile Organics	EPA 8015B	EPA 5021 EPA 5030B EPA 5031 EPA 5032 EPA 5035 EPA 3585
TPH – Low Boiling Point (GRO)	EPA 8015B (GRO)	EPA 5030B EPA 5035 EPA 3585
Volatiles by GC/Hall/PID	EPA 8021B	EPA 5021 EPA 5030B EPA 5032 EPA 5035 EPA 3585
Volatile Organics by GC/MS: Capillary Column	EPA 8260B	EPA 5021 EPA 5030B EPA 5031 EPA 5032 EPA 5035 EPA 3585

O. Solid and Hazardous Waste Methodology:

Organic Analyses: Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each method and organic contaminant circled. Submit current IDOCs and MDL Studies (within the past year) for each determinative method and the applicable extraction/preparation and clean-up method employed.

Parameter	EPA[1] Methodology	Extraction/Preparation Method
Semivolatiles		
Acetonitrile by GC-NPD	EPA 8033	
Acrylamide, Acrylonitrile, & Acrolein by HPLC	EPA 8316	
Acrylamide by GC	EPA 8032A	
Acrylonitrile by GC	EPA 8031	
Base Neutrals & Acids by GC/MS:Capillary Column	EPA 8270C	EPA 3510C EPA 3520C EPA 3535 EPA 3540C EPA 3541 EPA 3545 EPA 3550B EPA 3560 EPA 3561 EPA 3580A
Base Neutrals & Acids by GC/FT-IR	EPA 8410	EPA 3510C EPA 3520C EPA 3535 EPA 3540C EPA 3541 EPA 3545 EPA 3550B EPA 3560 EPA 3561 EPA 3580A
Carbonyl Compounds by HPLC	EPA 8315A	
Chlorinated Hydrocarbons by GC:Capillary Column	EPA 8121	EPA 3510C EPA 3520C EPA 3540C EPA 3541 EPA 3550B EPA 3580A
EDB & DBCP by Microextraction/GC	EPA 8011	
Extractable Nonvolatiles by HPLC/TS/MS	EPA 8321A	BASED ON ANALYTE

O. Solid and Hazardous Waste Methodology:

Organic Analyses: Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each method and organic contaminant circled. Submit current IDOCs and MDL Studies (within the past year) for each determinative method and the applicable extraction/preparation and clean-up method employed.

Parameter	EPA[1] Methodology	Extraction/Preparation Method
Extractable Nonvolatiles by HPLC/PB/MS	EPA 8325	BASED ON ANALYTE
Haloethers by GC	EPA 8111	EPA 3510C EPA 3520C EPA 3540C EPA 3541 EPA 3550B
N-Methylcarbamates	EPA 8318	
Nitroaromatics & Cyclic Ketones by GC	EPA 8091	EPA 3510C EPA 3520C EPA 3540C EPA 3541 EPA 3545 EPA 3550B EPA 3580A
Nitroglycerine by HPLC	EPA 8332	
Nitroaromatics, Nitramines by HPLC	EPA 8330	
Nitrosamines by GC	EPA 8070A	EPA 3510C EPA 3520C EPA 3540C EPA 3541 EPA 3545 EPA 3550B
PAHs & PCBs by TE/GC/MS	EPA 8275A	
Phenols by GC	EPA 8041A	EPA 3510C EPA 3520C EPA 3540C EPA 3541 EPA 3545 EPA 3550B EPA 3580A
Phthalate Esters by GC: Capillary Column	EPA 8061A	EPA 3510C EPA 3520C EPA 3535 EPA 3540C EPA 3541 EPA 3545 EPA 3550B EPA 3580A

O. Solid and Hazardous Waste Methodology

Organic Analyses: Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each method and organic contaminant circled. Submit current IDOCs and MDL Studies (within the past year) for each determinative method and the applicable extraction/preparation and clean-up method employed.

Parameter	EPA[1] Methodology	Extraction/Preparation Method
Polynuclear Aromatic Hydrocarbons by GC/FID	EPA 8100	EPA 3510C EPA 3520C EPA 3540C EPA 3541 EPA 3545 EPA 3550B EPA 3561 EPA 3580A
Polynuclear Aromatic Hydrocarbons by HPLC	EPA 8310	EPA 3510C EPA 3520C EPA 3540C EPA 3541 EPA 3545 EPA 3550B EPA 3561 EPA 3580A
Tetrazine Reverse Phase by HPLC	EPA 8331	
TPH – High Boiling Point (DRO)	EPA 8015B (DRO)	EPA 3510C EPA 3520C EPA 3535 EPA 3540C EPA 3541 EPA 3545 EPA 3550B EPA 3560 EPA 3580A
Dioxin & Dibenzofurans		
PCDDs/PCDFs by HRGC/LRMS	EPA 8280A	
PCDDs/PCDFs by HRGC/HRMS	EPA 8290	

O. Solid and Hazardous Waste Methodology:

Organic Analyses: Circle only the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each method and organic contaminant circled. Submit current IDOCs and MDL Studies (within the past year) for each determinative method and the applicable extraction/preparation and clean-up method employed.

Parameter	EPA[1] Methodology	Extraction/Preparation Method
Infared Methods		
Fourier Transform Infrared by GC/FT-IR	EPA 8410	
Bis(2-chloroethyl) Ether & Hydrolysis by GC/FT-IR	EPA 8430	
Tot, Recoverable Petro. Hydrocarbons	EPA 8440	
Immunoassay Methods		
Immunoassay	EPA 4000	
Pentachlorophenol by Immunoassay	EPA 4010A	
2,4-Dichlorophenoxyacetic Acid by Imm.	EPA 4015	
Polychlorinated Biphenyls by Imm.	EPA 4020	
Soil Screening for TPH by Imm.	EPA 4030	
Soil Screening for PAHs by Imm.	EPA 4035	
Soil Screening for Toxaphene by Imm.	EPA 4040	
Soil Screening for Chlordane by Imm.	EPA 4041	
Soil Screening for DDT by Imm.	EPA 4042	
TNT Explosives in Soil by Imm.	EPA 4050	
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	EPA 4051	
Miscellaneous Screening Methods		
Headspace	EPA 3810	
Hexadecane Ext. & Screening of Purg.	EPA 3820	
Trinitrotoluene (TNT) in Soil (Color.)	EPA 8515	
Polychlorinated Biphenyls in Soil	EPA 9078	
Polychlorinated Biphenyls in Trans. Oil	EPA 9079	

P. Shellfish Waters and Meats Methodology:

Microbiology: Circle on the EPA-approved methodology that the laboratory is seeking certification to perform. Out-of-state laboratories: The State Certifying Authority's certificate must reflect the appropriate certification for each parameter and method circled.

Parameter	Methodology[1]		
	EPA	Standard Methods	Other
E. coli – EC + MUG	EPA 1104	SM 9222 G (19th)	
Fecal Coliform – MPN		SM 9221 E (18th)	
Heterotrophic Bacteria		SM 9215 B	
Total Coliform - MPN		SM 9221 B	

Q. Quality Control: Check the quality control practices that apply to your laboratory with the frequency performed, or list as N/A if not applicable to your laboratory operations.

Quality Control	Yes	No	Frequency	Comments
Quality Assurance Plan[29]				
Standard Operating Procedures[29]				
Initial Demonstration of Precision and Accuracy for each Method[29]				
Method Detection Limit Study[29]				
Chain of Custody[29]				
Sample Identification System				
Use of Unknown PT samples[29]				
Documented Standard Curve for each Method and Analyte				
Standard Curve Checked Prior to each Sample Set				
Verify Curve Every Ten Samples				
Laboratory Reagent Water Blanks				
Use of Spiked Samples for Recovery Data				
Use of Known Reference Samples				
Use of Duplicate Samples				
QC Charts or Tabulations				
Service Contract on Balances				
Use of ASTM Class 1, 2, or 3 Weights				
Dating of Chemicals (received and opened)				
Chemical Inventory Log				
Standard Preparation Records				
Column Inventory Log				
GC, GC/MS Maintenance Log				
Use of Field and/or Trip Blanks				
Use of Field Duplicates				
Use of Laboratory Control Samples				

R. Statement of Validation

I have read South Carolina State Regulation 61-81, titled State Environmental Laboratory Certification. In accordance with that Regulation, as the designated Laboratory Director, I submit this completed Application to the State Environmental Laboratory Certification Program. I attest that the information on pages 1-28 is true, accurate and complete to the best of my knowledge. I agree to notify the State Environmental Laboratory Certification Program within 15 days of changes in laboratory name, ownership, laboratory director, location, personnel, facilities, equipment, methodology, and/or record keeping practices, or any other factors which might impair the ability of the laboratory to perform in accordance with the terms of certification documented in Regulation 61-81.

With the attached application(s), I hereby apply for certification in accordance with the terms listed in South Carolina Environmental Laboratory Certification Regulation 61-81.

_____
Name of Laboratory Director (type or print)

_____ _____
Signature of Laboratory Director Date

S. Designation of Laboratory Director

THIS IS A SAMPLE FORM.

YOUR LABORATORY'S LETTERHEAD

Director, Office of Environmental Laboratory Certification
S.C. Department of Health and Environmental Control
P.O. Box 72
State Park, South Carolina 29147

Dear Sir:

In accordance with South Carolina State Environmental Laboratory Certification Regulation 61-81, Section D(12), as proprietor of _____, I designate _____ as the Laboratory Director. He/she has the responsibility of supervising the operations of the laboratory and insuring the quality and accuracy of the data reported. If there is a change in the Laboratory Director, I agree to notify the Office of Environmental Laboratory Certification within 15 days of this change.

_____
(Proprietor's Signature and Date)

_____
(Type or Print Name)

_____
(Type or Print Title)

Application Footnotes

1 **Safe Drinking Water Act:**

The 18th, 19th, and 20th editions of *Standard Methods for the Examination of Water and Wastewater,* 1992, 1995, and 1998 are approved for use with the Safe Drinking Water Act for most parameters. For monitoring under the disinfection by-product rule, the 19th and 20th editions of *Standard Methods for the Examination of Water and Wastewater*, 1995 are the approved version. The *Standard Methods Online* version that is approved is indicated by the last two digits in the method number, which is the year of approval by the Standard Method Committee. Standard Methods Online versions are available at *http://www.standardmethods.org.*

EPA Methods 200.7, 200.8, and 200.9 are referenced in "Methods for the Determination of Metal in Environmental Samples-Supplement I," EPA/600/R-94/111 May 1994. It is available at NTIS, PB95-125472.

For approved methodology, refer to 40 CFR Parts 141 and 143 for the National Primary and Secondary Drinking Water Regulations.

Clean Water Act:

For the monitoring under the Clean Water Act, the 18th, 19th, and 20th editions of *Standard Methods for the Examination of Water and Wastewater*, 1992, 1995, and 1998 are the approved method references for most parameters.

For approved methodology, refer to 40 CFR Part 136, "Guidelines Establishing Test Procedures for the Analysis of Pollutants under the Clean Water Act."

EPA Methods 200.7, 200.8, and 200.9 are referenced in "Methods for the Determination of Metal in Environmental Samples-Supplement I," EPA/600/R-94/111 May 1994. It is available at NTIS, PB95-125472.

Also refer to 40 CFR Part 403, "General Pretreatment Regulations for Existing and New Sources for Pollution," 40 CFR Part 430, "The Pulp, Paper, and Paperboard Point Source Category," 40 CFR Part 439, "Pharmaceutical Manufacturing Point Source category," 40 CFR Part 455, "Pesticide Chemicals," 40 CFR Part 465, "Coil Coating Point Source Category," and 40 CFR Part 503, "Standards for the Use or Disposal of Sewage Sludge."

Solid and Hazardous Waste Testing:

For Solid and Hazardous Waste testing, the EPA approved method reference is SW-846, Third Edition of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", amended by Updates I, II, II, IIA, IIB, III, IIIA, and IIIB.

Also refer to 40 CFR Parts 260, 261,264, 265, 268, and 270, "Hazardous Waste Management System; Testing and Monitoring Activities".

2 MI agar also may be used. Preparation and use of MI agar is set forth in the article "New Medium for the Simultaneous Detection of Total Coliform and *Escherichia coli* in Water" by Brenner, K.P.,et. al., 1993, Appl. Environ. Microbiol. 59:3534-3544.

3 Colilert is also known as the ONPG-MUG test.

4 A description of the Colisure Test Feb. 28, 1994 can be obtained from IDEXX Laboratories, Inc. One IDEXX Drive, Westbrook, Maine 04092. Phone: 800-321-0207. The website is www.idexx.com.

5 A description of the E*Colite® Test, "Presence/Absence for Coliforms and *E.Coli* in Water", Dec. 21, 1997 is available from Charm Sciences.

6 A description of the m-ColiBlue24® Test, Aug.17, 1999 is available from the Hach Company.

Application Footnotes (Cont.)

7 "Methods for the Determination of Inorganic Substances in Environmental Samples", EPA/600/R-93/100, August 1993. Available from NTIS, PB94-120821.

8 This method is not approved for compliance samples for the disinfection by-product rule.

9 National Council for the Paper Industry for Air and Stream Improvement, Technical Bulletin 253, December 1971.

10 GLI Method 2, "Turbidity", November 2, 1992, Great Lakes Instruments, Inc., 8855 North 55th Street, Milwaukee, Wisconsin 53223.

11 Under the disinfection by-product rule, the amperometric titration or spectrophotometry may be used for routine daily monitoring of chlorite at the entrance to the distribution system, as prescribed in §141.132(b)(2)(i)(A). Ion chromatography must be used for routine monthly monitoring of chlorite in the distribution system as prescribed in §141.132(b)(2)(i)(B) and (b)(2)(ii).

12 EPA Method 300.1, "Determination of Inorganic Anions in Drinking Water by Ion Chromatography", Revision 1.0, USEPA, 1997, EPA/600/R-98/118. Available from the EPA and NTIS, PB98-169196.

13 For the Safe Drinking Water Act compliance monitoring, EPA Methods 502.2, 504.1, 505, 506, 507, 508, 508.1, 551.2, 524.2, 525.2, 531.1, 551.1 and 552.2 are in the "Methods for the Determination of Organic Compounds in Drinking Water-Supplement III", EPA/600/R-95-131, August 1995. EPA Methods 508A and 515.1 are in "Methods for the Determination of Organic Compounds in Drinking Water", EPA/600/4-88-039, December 1988, Revised July 1991. EPA Methods 547, 550, and 550.1 are in "Methods for the Determination of Organic Compounds in Drinking Water-Supplement I", EPA/600-4-90-020, July 1990. EPA Methods 548.1, 549.1, 552.1, and 555 are in "Methods for the Determination of Organic Compounds in Drinking Water-Supplement II", EPA/600/R-92-129, August 1992. EPA Method 1613 Revision B is titled "Tetra-through Octa-Chlorinated Dioxins and Furans by Isotope-Dilution HRGC/HRMS", EPA/821-B-94-005, October 1994.

14 PCBs are quantitatively identified as Arochlors and measured for compliance purposes as decachlorobiphenyl.

15 Method detection limit studies must be submitted for all Arochlors (PCBs).

16 Users of Method 505 may have more difficulty in achieving the required detection limits than users of Methods 508.1, 525.2 or 508.

17 Enterolert, IDEXX Laboratories, Inc.

18 EPA Method 1600, EPA-821-R-97-004, May 1997.

19 EPA 821-R-02-012

20 EPA 821-R-02-013

21 EPA 821-R-02-014

22 Requires EPA Region IV approval.

23 Preparation and use of MI agar is set forth in the article "New medium for simultaneous detection of total coliform and *Escherica coli* in water" EPA/600/J-99/225.

24 Recommended for enumeration of target organism in sewage sludge.

25 Must be accompanied with the applicable metals and organic method certification.

Application Footnotes (Cont.)

26 Must be accompanied with the applicable volatiles certification.

27 Must be accompanied with the distillation procedure.

28 The extraction or sample preparation method needed will be based on the matrix and analytes of interest.

29 Must accompany the completed application form.

30 EPA Method 1624C and 1625C are for use with pharmaceutical effluents.

31 Reserved.

32 Available cyanide, Method OIA-1677 (Available Cyanide by Flow Injection, Ligand Exchange, and Amperometry), ALPKEM, A Division of OI Analytical, PO Box 9010 College Station, TX 77842-9010. The website is www.oianalytical.com.

33 The description for the Kelada 01 Method, "Kelada Automated Test Methods for Total Cyanide, Acid Dissociable Cyanide, and Thiocyanate", revision 1.2, August 2001, EPA# 821-B-01-009 for cyanide is available from the National Technical Information Service (NTIS), PB 2001-108275, 5285 Port Royal Road, Springfield, VA 22161. The toll free telephone number is 800-553-6847. The website is www.ntis.gov.

34 The description for the QuickChem Method 10-204-00-1-X "Digestion and Distillation of Total Cyanide in Drinking and Wastewaters Using MICRO DIST and Determination of Cyanide by Flow Injection Analysis", Revision 2.1, November 30, 2000 for cyanide is available from Lachat Instruments, 6645 W. Mill Rd., Milwaukee, WI 53218, USA. Phone: 414-358-4200. The website is www.lachatinstruments.com.

35 A description of the Hach FilterTrak Method 10133, "Determination of Turbidity by Laser Nephelometry", January 2000, Revision 2.0, can be obtained from: Hach Co., PO Box 389, Loveland, CO 80539-0389. Phone: 800-227-4224. The website is www.hach.com.

36 A description of the SimPlate method, "IDEXX SimPlate TM HPC Test Method for Heterotrophs in Water", November 2000 can be obtained from IDEXX Laboratories, Inc., One IDEXX Drive, Westbrook, Maine 04092. Phone: 800-321-0207. The website is www.idexx.com.

37 The time from sample collection to initiation of analysis may not exceed 8 hours. Systems must hold samples below 10^{o}C during transit.

38 This method requires confirmation of E. Coli presence using the Kovac Indole Reagent as described in the method. Membrane Filter Method using Chromocult® Coliform Agar is described in the document, "Chromocult® Coliform Agar Presence/Absence Membrane Filter Test Method for Detection and Identification of Coliform Bacteria and Escherica coli in Finished Waters", November 2000, version 1.0, available from EM Science (an affiliate of Merck KGgA, Darmstadt Germany), 480 S. Democrat Road, Gibbstown, NJ 08207-1297. Phone: 800-222-0342.

39 This method requires confirmation of E. Coli presence using the Kovac Indole Reagent as described in the method. The ReadyCult® Coliforms 100 Presence/Absence Test is described in the document, "ReadyCult® Coliforms 100 Presence/Absence Test for Detection and Identification of Coliform Bacteria and Escherica Coli in Finished Waters", November 2000, version 1.0, available from EM Science (an affiliate of Merck KGgA, Darmstadt Germany), 480 S. Democrat Road, Gibbstown, NJ 08207-1297. Phone: 800-222-0342.

40 Colitag® product for the determination of the presence/absence of total coliforms and E.coli is described in ``Colitag ® Product as a Test for Detection and Identification of Coliforms and E.coli Bacteria in Drinking Water and Source Water as Required in National Primary Drinking Water Regulations,'' August 2001, available from CPI International, Inc., 5580 Skylane Blvd., Santa Rosa, CA, 95403. Phone (800) 878-7654. The website is www.cpiinternational.com.

Application Footnotes (Cont.)

41 *In Vitro* Determination of Chlorophyll *a* and Pheophytin *a* in Marine and Freshwater Algae by Fluorescence," Revision 1.2, May 1996. Nation Exposure Research Laboratory, Office of Research and Development, U.S. Environmental Protection Agency, Cincinnati, Ohio 45268.

42 Sample preparation for fecal coliform analysis in biosolids samples is addressed in the EPA publication "Environmental Regulations and Technology Control of Pathogens and Vector Attraction in Sewage Sludge" EPA document EPA/625/R-92/013. The current version of this document is July 2003. Appendix F addresses the proper techniques and dilutions for preparing biosolids samples for analysis of fecal coliforms using membrane filtration or the Most Probable Number analytical techniques. This method not required if using EPA Methods 1680 or 1681.

43 The Gamma Emitters category includes Barium 133, Cesium 134, Cesium 137, Cobalt 60, and Zinc 65.

44 This method is not approved under 40CFR Part 136. It is approved only for Part 503 biosolids.

45 Ion chromatography & post column reaction or IC/ICP-MS must be used for monitoring of bromate for purposes of demonstrating eligibility of reduced monitoring, as prescribed in §141.132(b)(3)(ii).

46 Samples must be preserved at the time of sampling with 50mg ethylenediamine (EDA)/L of sample and must be analyzed within 28 days.

47 Inorganic carbon must be removed from the samples prior to analysis. TOC samples must not be filtered prior to analysis. TOC samples must be acidified at the time of sample collection to achieve pH less than or equal to 2 with minimal addition of the acid specified in the method or by the instrument manufacturer. Acidified TOC samples must be analyzed within 28 days.

48 DOC samples must be filtered through 0.45-µm pore-diameter filter as soon as practical after sampling, not to exceed 48 hours. After filtration, DOC samples must be acidified to a pH of less than or equal to 2 with minimal addition of acid specified in the method or by the instrument manufacturer. Acidified DOC samples must be analyzed within 28 days of sample collection. Inorganic carbon must be removed from the samples prior to analysis. Water passed through the filter prior to filtration of the sample must serve as the filtered blank. This filtered blank must be analyzed using procedures identical to those used for analysis of the samples and must meet the following criteria: DOC<0.5mg/L.

49 Prior to analysis, UV_{254} samples must be filtered through a 0.45 µm pore-diameter filter. The pH of the UV_{254} samples may not be adjusted. Samples must be analyzed as soon as practical after sampling, not to exceed 48 hours.